

## ABSTRACT

Developments in technology have an effect on the parking area which is a necessity for motorized vehicle drivers. In general, parking areas are needed in office areas, shopping centers, and certain institutions. Especially for offices, there is often no payment system, so the process of entering and leaving can save time. The conventional method creates obstacles for drivers due to queues. Because this method still uses a ticket or identification. In this final project, a solution is given to control devices and gates in the parking area, as well as security gates. With a case study of private vehicles and office parking lots, this system works on the main gate, with a flow that is, if the vehicle object moves close to the bar at a certain speed, the camera can detect the distance of the object from the gate, then classifies the vehicle plate if the plate is suitable then automatically the system will open the gate.

***Keywords: Parking Gates, Camera, Plate Recognition, Object Detection***